

FIG. 1A

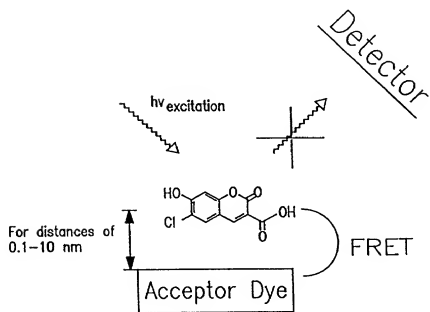


FIG. 1B

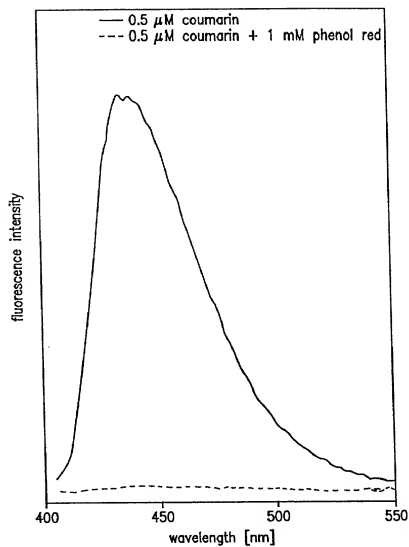


FIG. 2

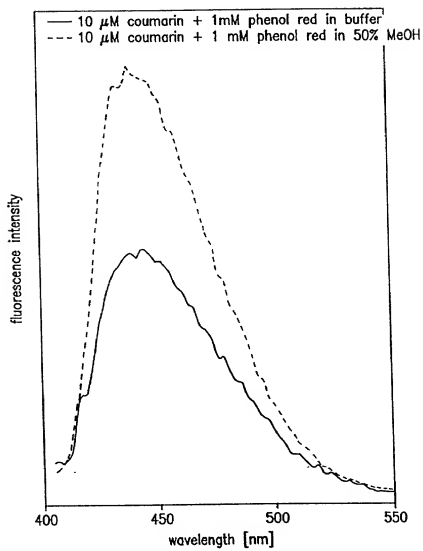


FIG. 3

Figure 1 is a semi-logarithmic plot showing the quenching of residual coumarin fluorescence by various quench agents. The y-axis represents 'Residual Coumarin Fluorescence' from 0.0 to 1.0. The x-axis represents 'Quench Agent Concentration [mM]' on a logarithmic scale from 0.01 to 1000. The legend identifies five quench agents: Schilling Red (dotted line with diamonds), Phenol red (dashed line with triangles), Higgins Ink (solid line with squares), Diatrizoic acid (dotted line with open diamonds), and Tris (2-aminoethyl) amine (solid line with filled circles). All agents show a decrease in fluorescence as concentration increases, with Tris and Diatrizoic acid being the most effective at higher concentrations.

Quench Agent Concentration [mM]	Schilling Red	Phenol red	Higgins Ink	Diatrizoic acid	Tris (2-aminoethyl) amine
0.01	1.00	1.00	1.00	1.00	1.00
0.05	1.00	1.00	0.50	1.00	0.63
0.1	1.00	0.80	0.30	1.00	0.43
0.2	1.00	0.28	0.17	1.00	0.23
0.5	1.00	0.12	0.08	1.00	0.11
1.0	1.00	0.05	0.04	1.00	0.04
2.0	1.00	0.02	0.02	1.00	0.02
5.0	1.00	0.01	0.01	1.00	0.01
10.0	1.00	0.00	0.00	1.00	0.00
100.0	1.00	0.00	0.00	0.90	0.95
200.0	1.00	0.00	0.00	0.72	0.92
500.0	1.00	0.00	0.00	0.51	0.81
1000.0	1.00	0.00	0.00	0.06	0.06

FIG. 4

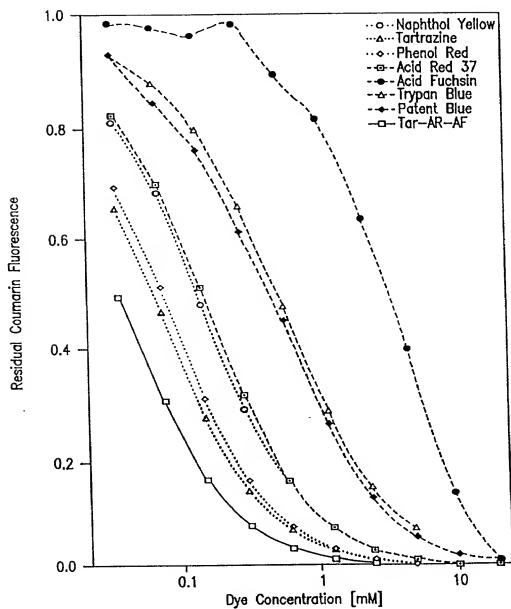


FIG. 5

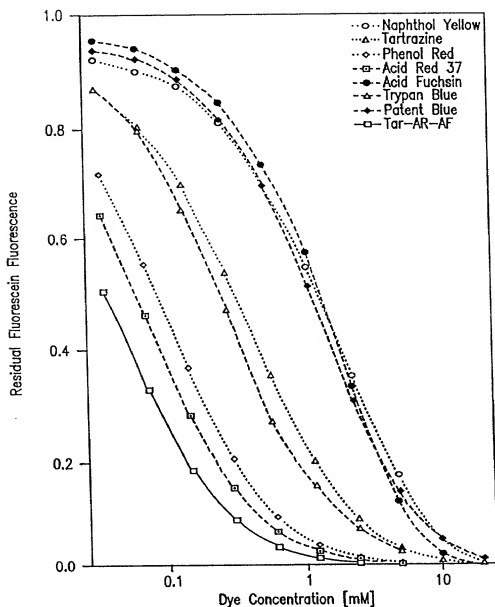


FIG. 6

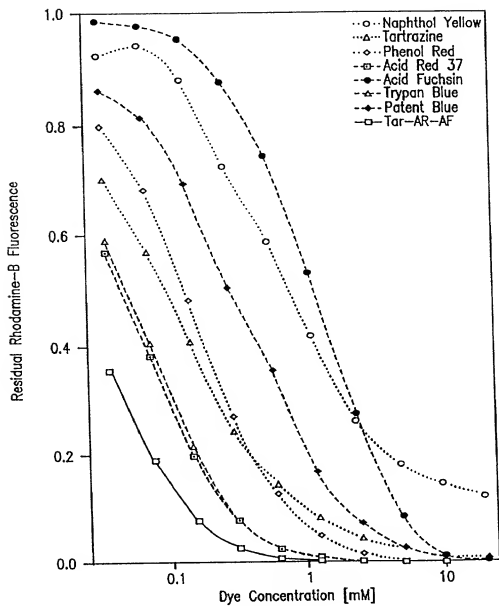


FIG. 7

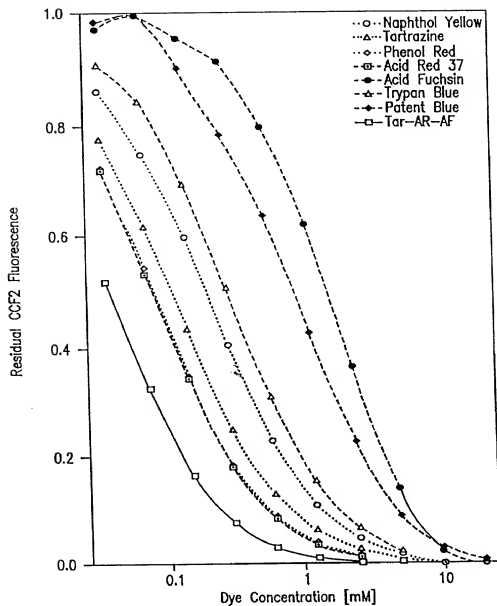


FIG. 8

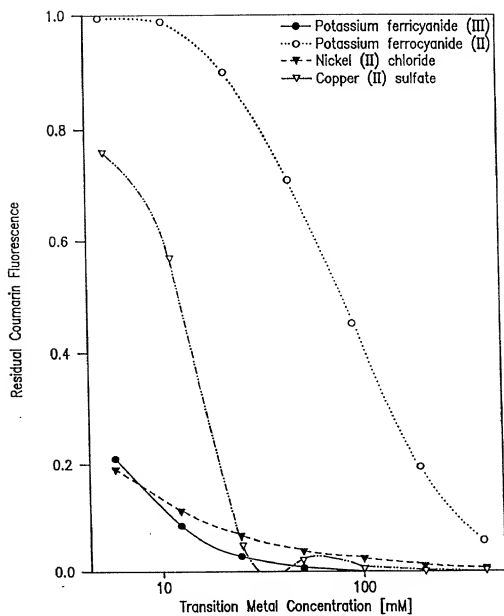


FIG. 9A

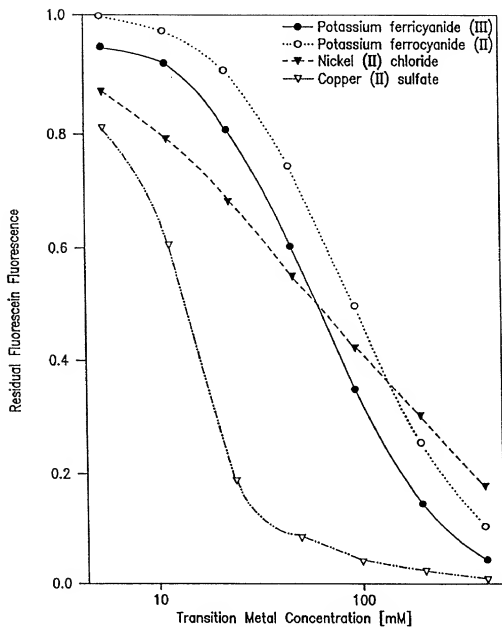


FIG. 9B

FIG. 9C

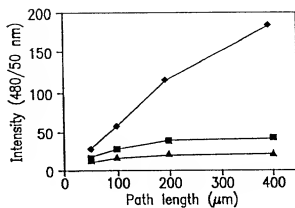


FIG. IOA

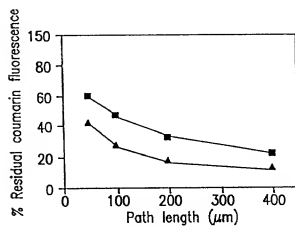


FIG. IOB

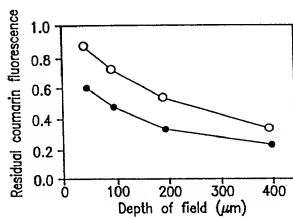


FIG. IOC

—●— Intensities observed with 20x objective
 —○— Calculated intensities (absorption only)

FIG. 11

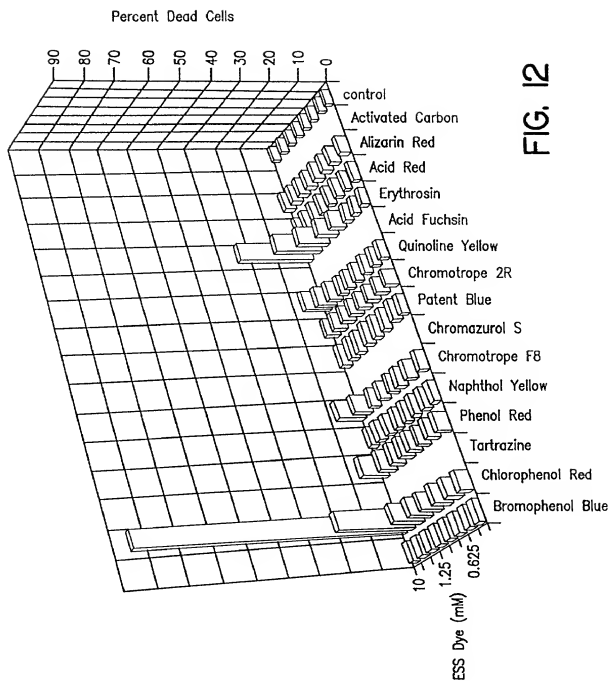


FIG. 12

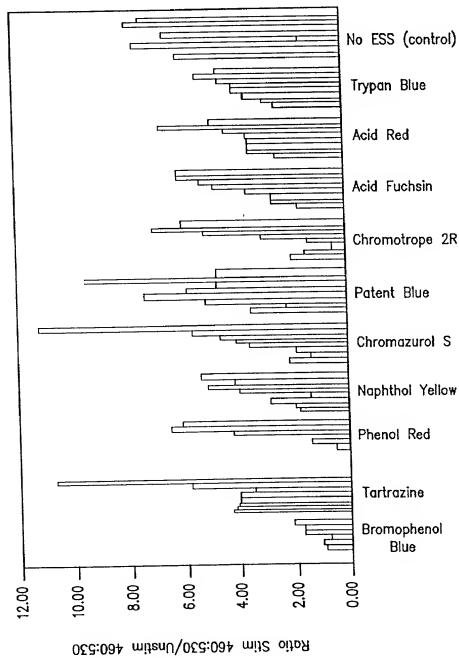


FIG. 13

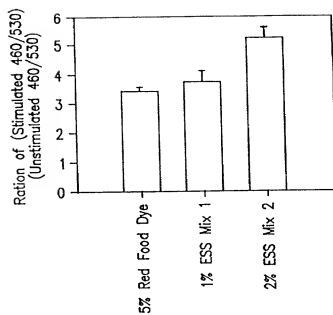


FIG. 14A

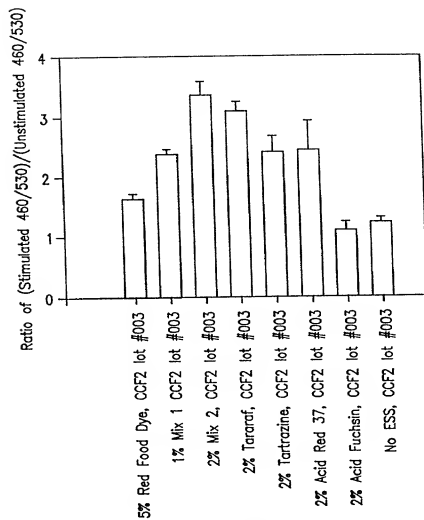


FIG. 14B